Precautions for Patients with Upper Extremity Lymphedema

Anyone who has undergone lymph node removal and/or radiation therapy is at risk of developing lymphedema. The capacity of the lymphatic system (transport capacity) to remove fluid and other substances (lymphatic loads) from the tissues has been reduced by these procedures to a certain degree. Lymphedema may occur directly after the surgery/radiation, may develop months or even years following the procedure, or it may never evolve.

Certain activities and situations may trigger the onset of lymphedema, or may exacerbate the symptoms of existing lymphedema, by either further reducing the transport capacity of the lymphatic system, or by increasing the amount of lymphatic loads. Individuals who are aware of these risk factors know what can be done to avoid the onset of swelling and infections, which are common in patients suffering from lymphedema (and those at risk). Knowing the necessary precautions also helps to prevent aggravation of the symptoms in existing lymphedema.

The following Do’s and Don’ts may have a cumulative effect. Whether one or more of these events or situations will be a triggering element, also depends on other factors, such as overall health (other conditions) and fitness, the extent of the initial procedure (scarring, number of lymph nodes removed), obesity and others.

Patients with Lymphedema, and those at risk of developing it, should observe the following precautionary measures. In many cases modifications to the life style are necessary, but a normal activity level should be maintained. In other words, individuals should not go to the extreme and refrain from using the extremity in fear of developing lymphedema.

Do’s and Don’ts for Upper Extremity Lymphedema

- **Injuries**
- **Blood Pressure**
- **Temperature**
- **Clothing, Jewelry**
- **Exercises**
- **Travel**
- **Skin Care**
- **Nutrition**

Avoid any injuries to the skin

1. Gardening: wear gloves
2. Pets: be careful playing with your pets (scratches) - wear gloves
3. Mosquito bites: wear insect repellants, avoid mosquito infested areas
4. Nail care: you should keep your fingernails cut short; avoid the use of scissors for cutting your fingernails; do not cut the cuticles. Avoid artificial nails
5. Shaving: use an electric razor to remove hair from the armpit; do not use razor blades
6. Injections: do not allow injections in the swollen (or at risk) arm. Have the injections in either the buttocks, in the thigh or the abdominal area
7. Venapunctures: do not allow blood to be drawn from the affected (or at risk) arm. Have the venapuncture in the other arm, or if both arms are affected, in the lower extremity (certain contraindications may exist). The physician may choose to use vascular access devices (vads, ports), if appropriate
8. To take proper care of minor injuries, always carry an alcohol swab, local antibiotic and a bandaid with you
9. Should you smoke, do not extinguish the cigarette with your affected hand
10. No piercing or tattoos on the arm or the area of the body above the waist.
Avoid having blood pressure taken on the affected (or at risk) arm

Have the clinician use the other arm, or if both arms are affected, an oversize pressure cuff may be used on the thigh or calf (blood pressure taken on the leg may produce a higher reading). If you can’t avoid having the blood pressure taken on the arm, make sure that the cuff is inflated only 10mm/Hg above the systolic pressure (this is the point at which the pulse stops) and that only manual equipment is used – automated equipment inflates generally to a very high pressure, which is held for a prolonged period.

Avoid heat
1. Avoid hot showers. Dry thoroughly but avoid scrubbing or rubbing the skin with the towel
2. Avoid hot packs and/or ice packs on your arm
3. Avoid saunas or hot tubs and whirlpools; do not sit too close to a fire place
4. Avoid massage (kneading, stroking, etc.) on the arm and the upper thorax. Note: Manual lymph drainage is not considered to be a form of massage
5. Avoid cosmetics that irritate the skin
6. Avoid sunburn. While in the sun, use sunscreen, cover the arm with long sleeves or a dry towel

Clothing/Compression Sleeve/Jewelry
1. Avoid clothing that is too tight (tight bras, sleeves)
2. You should use a comfortable bra with wide and padded shoulder straps
3. Do not wear tight jewelry (rings, bracelets), avoid elastic wristbands
4. Prosthesis: discuss with your doctor and/or therapist, what kind of external breast prosthesis is appropriate in your case (heavier silicone or lighter foam)
5. Wear your compression sleeve all day. See your therapist at least every six months (or sooner) to check the condition of the sleeve. Use a rubber glove when applying your compression sleeve. If necessary, apply your bandages at night

Exercises
1. Always discuss proper exercises and activities with your therapist
2. Avoid movements that overstrain; should you experience discomfort in your arm, reduce the exercise activity and elevate your arm
3. Avoid heavy lifting:
   - *Beneficial Activities*: Swimming, lymphedema exercise program, self-MLD, Yoga, water aerobics, walking
   - *Medium Risk Activities*: Jogging/running, biking (use aero-bars, minimize gripping), stair master (do not use grips, elevate the arm sometimes), Norditrac/treadmill (use minimal grips), horse riding (hold reins loose), extreme hiking or mountain climbing
   - *High Risk Activities*: Gardening (wear gloves), tennis/racquet sports, golf, shoveling snow, moving furniture, carrying luggage, carrying heavy grocery bags, scrubbing, weight lifting with the arm (not more than 10-15 lbs), intense horse riding (gripping reins)

**Note:**

If you wish to engage in either medium or high-risk activities, you should discuss additional precautionary measures (extra compression during the activity) with your therapist or doctor.

**Travel**

1. Avoid mosquito-infested regions
2. Wear an additional bandage or garment on top of your compression sleeve when traveling by car, train or air (see also Lymphedema and Air Travel and Useful Tips for the Airline Traveler below). Incorporate frequent stops, or get up from your seat frequently

**Skin Care**

1. Keep your skin meticulously clean
2. Inspect your skin for any cracks, fungal infections or rashes
3. Moisturize your skin daily, especially after taking a shower or bath. Use appropriate ointments or lotions (preferably free of alcohol and fragrance)
4. Dry your skin thoroughly after taking a shower or bath (especially in skin creases and web spaces). Use a soft towel and do not scrub
5. If you undergo radiation therapy apply the ointments recommended by your physician to any radiation redness on your skin. Avoid chlorinated pools and direct exposure to sunlight

**Nutrition**

1. Obesity may have a negative effect on your swelling; maintain your ideal body weight
2. There is no special diet for lymphedema. Keep your diet well balanced. Today most nutritionists recommend a low-salt and low-fat diet, high in fiber
3. Eating too little protein in the hope to have a positive effect on lymphedema (high-protein edema) is not recommended and may cause serious health problems. Reducing the protein intake will not reduce the protein component in lymphedema
See your Doctor if you:

1. Have any signs of an infection (fever, chills, red and hot skin)
2. Notice any itching, rash, fungal infections, or any other unusual changes on the skin
3. Experience an increase in swelling in your fingers, hand, arm or chest